p<0.001; second-line treatment: coefficient 0.377, p=0.019), pulmonary infection (coefficient 0.780, p<0.001), and suppressed bone marrow function (coefficient 0.352, p=0.047) were significantly associated with increased direct medical costs and urban resident insurance (coefficient -0.410, p<0.001) was significantly associated with less direct medical costs. **CONCLUSIONS:** The direct medical costs associated with MM in publically insured Chinese patients varied substantially by treatment settings. Except treatment settings, complications, and comorbidities, the social economic status associated with insurance type and residence city size have a substantial impact on public health resource utilization in Chinese patients with MM.

PCN104

ECONOMIC AND HUMANISTIC BURDEN OF DUCTAL CARCINOMA IN SITU

Saunders R[1], Plun-Favreau J[2], Valentine WJ[3]

[1]*Ossian Health Economics and Communications GmbH, Basel, Switzerland,* [2]*Genomic Health International, Geneva, Switzerland,* [3]*Ossian Health Economics and Communications, Basel, Switzerland*

OBJECTIVES: Breast cancer screening has resulted in increased diagnosis of ductal carcinoma in situ (DCIS). Compared with other breast cancers, little is known about the cost of illness or quality of life burden associated with DCIS. **METHODS:** A structured literature search strategy was developed for identifying DCIS cost and QOL data in three publication databases (PubMed, EMBASE, and the Cochrane Library). Primary and secondary search criteria were "Carcinoma, Intraductal, Noninfiltrating" or "DCIS" and "Quality of life" or "Costs" or "Resource use", respectively. Publications for review were restricted to those published between 2004 and 2014 inclusive. Abstract screening was performed by a single reviewer, with included results checked for protocol alignment by two further reviewers. **RESULTS:** In total, 585 articles were identified for review, of which 55 were duplicates between databases. Following abstract review, 111 articles were retained for analysis. The majority of excluded articles were not specific to DCIS or did not report cost or QOL data. DCIS does not directly affect QOL. Anxiety caused by DCIS diagnosis is a key decrement to QOL, although its impact can be transient. Longer term impacts on body image and role limitation were apparent following surgical intervention. Evidence of QOL detriments due to DCIS treatment were identified. Use of post-surgical radiotherapy is increasing, and patients receiving lumpectomy plus radiotherapy had significantly lower 'mental health' (74.0 vs. 77.4) and 'vitality' (59.3 vs. 63.5) QOL than controls. There is little data on the cost burden of DCIS. Individual cost items were identified, with radiotherapy estimated at USD 10,700 to 34,900. **CONCLUSIONS:** Anxiety about tumour recurrence and body image and treatment side effects are the major factors influencing patient QOL in DCIS. Adverse events and costs associated with DCIS treatments makes the choice of treatment pathway important for both patients and healthcare providers.

PCN105

COST OF CERVICAL CANCER AND CERVICAL INTRAEPITHELIAL NEOPLASIA IN CROATIA

Bencina G

GSK, Zagreb, Croatia

OBJECTIVES: Cervical cancer, caused by oncogenic Human Papillomavirus (HPV) types, is in Croatia the tenth most common cancer in women and accounted for 106 women deaths in 2012. The aim of this study was to evaluate the costs associated with the diagnostic and treatment of cervical cancer and cervical intraepithelial neoplasia in Croatia in 2012. **METHODS:** Publicly available data on the costs related to cervical cancer and cervical intraepithelial neoplasia diagnostic and treatment were collected. The main sources for the number of cases were the Croatian Institute of Public Health Yearbook for 2012 and Croatian Cancer Registry data. For the unit cost, the list of Diagnosis-Related Groups codes was used. When country-specific information was unavailable, reference to international data was used. Total cost was calculated by multiplying the number of cases with unit cost. Only direct medical costs were taken into consideration, using governmental perspective. **RESULTS:** In 2012, cervical cancer and cervical intraepithelial neoplasia amounted to a total cost of €5,418,790.70. Papanicolaou (Pap) smear tests represent the major source of expenditure with a total cost of €2,367,686.92. A total of 374,484 Pap smear tests were carried on in 2012, from which 7.3% were pathological. **CONCLUSIONS:** Cervical cancer and cervical intraepithelial neoplasia caused by high risk oncogenic HPV-types represent an important health and economic burden in Croatia. The results of this analysis may be useful to assess the potential reduction in cost associated with HPV-related diseases if additional prevention strategies were implemented.

PCN106

THE ECONOMICS OF THE TREATMENT AND FOLLOW-UP OF PATIENTS WITH GLIOBLASTOMA

De Paepe A[1], Vandeneede N[1], Strens D[2], Specenier P[3]

[1]*Antwerp University, Antwerp, Belgium,* [2]*Realidad, Grimbergen, Belgium,* [3]*Antwerp University Hospital, Edegem, Belgium*

OBJECTIVES: To summarize the existing literature regarding the medical cost associated with treatment and follow-up of glioblastoma. **METHODS:** PubMed was used as search engine to retrieve publications in Medline using the search terms "(glioblastoma) AND (cost)" with a publication date filter (from January 1st 2000 up to September 1st2014) and language filter (English). This search yielded 107 publications of which 14 were relevant for this review. Costs were recalculated in Euros (€) using the June 5 2015 currency rate of $1 = €0.8914, CA$1 = €0.7131 and 1£ = €1.3667. **RESULTS:** Two studies calculated the average total medical cost of glioblastoma treatment including direct hospital centered costs from diagnosis to death and one study included healthcare payer perspective cost from diagnosis to two years of follow-up. The cost ranged between €12,229 - €43,894 (median: €39,000). Two studies calculated the average cost of the combination of surgery and chemoradiotherapy which varied from €16,007 per patient in Canada to €41,744 per patient in Switzerland. The addition of temozolomide to radiotherapy prolongs survival and improves quality of life. The incremental cost-effectiveness ratio (ICER) of temozolomide plus radiotherapy as compared to radiotherapy alone ranged from €49,054 (UK) to €77,854 (China) per quality adjusted life years (QALY) and €37,361 per life years gained (LYG)(Europe and Canada). One French study showed an improvement in survival of 4 months between 2004 and 2012, with an ICER of €54,355 per LYG, due to an increased use of temozolomide and bevacizumab. **CONCLUSIONS:** The literature on the cost of treatment and follow up of glioblastoma patients and on the cost-effectiveness of treatment modalities used in glioblastoma is scarce. Wide variations in cost are reported, probably reflecting the variation in health care systems.

PCN107

A SYSTEMATIC LITERATURE REVIEW OF ECONOMIC BURDEN OF MYELOFIBROSIS

Sly IE[1], Yang Y[2], Lee D[1]

[1]*BresMed, Sheffield, UK,* [2]*Baxalta, Inc., Cambridge, MA, USA*

OBJECTIVES: To characterise the economic burden of myelofibrosis and associated areas of unmet need. **METHODS:** A systematic literature review was performed for world-wide cost-effectiveness, cost and resource studies published between January 2004 and September 2014. Databases included MEDLINE, MEDLINE In-process, EconLit, EMBASE and the Cochrane Library, as well as HTA websites. **RESULTS:** The search identified 261 cost-effectiveness and 231 cost and resource papers. Following two rounds of assessment, two and eight studies, respectively, were included. Bennett et al., 2013, reported a substantial rise in total costs from USD10,523 in the year prior to diagnosis to USD51,654 in the year after diagnosis. A lifetime model developed by El Ouagari et al., 2012, (based on COMFORT-II data) predicted lifetime costs of CAD494,859 and CAD421,755 for ruxolitinib and best available therapy (BAT), respectively. The model calculated high indirect costs due to employment absenteeism for patients taking ruxolitinib (CAD71,848) and BAT (CAD96,458), indicating high burden for patients and society. Bennett et al. reported that costs were 85% greater in patients with previous anaemia treatment, including transfusions. Vekeman et al., 2015, reported that 18% of transfusion-dependant patients received iron chelation therapy, with significantly higher monthly pharmacy costs vs. those without (mean difference: $1,426, p=0.004). El Ouagari et al. predicted lifetime transfusion costs of CAD18,299 for patients taking ruxolitinib and CAD13,456 for those on BAT, suggesting that patients treated with ruxolitinib may experience worsening of anaemia. This is consistent with COMFORT-I data, which showed that transfusion-dependant ruxolitinib patients increased from 25% at baseline to 40% at Weeks 8-12 (Pardanani and Tefferi, 2014; not identified via this search). **CONCLUSIONS:** Myelofibrosis leads to significant direct costs for health systems and substantial absenteeism costs for patients. Despite the available treatments, patients with disease and treatment emergent cytopenias and transfusion dependency require additional medical management, further augmenting the economic burden.

PCN108

THE LIFE TIME COST-OF-DISEASE (COD) OF METASTATIC COLORECTAL CANCER (MCRC) IN TURKEY: AN EXPERT PANEL APPROACH FOR ESTIMATION OF COSTS

Deger C[1], Telli F[2], Gunaldi M[3], Keskin S[4], Saglam S[5], Ozdemir O[6], Sar C[1], Parali E[1], Erdal E[1], Sumer F[1], Ozel O[1], Asan S[1]

[1]*Bayer Turk Kimya San. Ltd. Sti., Istanbul, Turkey,* [2]*Haydarpasa Numune Training and Research Hospital, Istanbul, Turkey,* [3]*Bakirkoy Dr. Sadi Konuk Training and Research Hospital, Istanbul, Turkey,* [4]*Memorial Sisli Hospital, Istanbul, Turkey,* [5]*Istanbul Bilim Universty, Istanbul, Turkey,* [6]*Yorum Consulting Ltd., Istanbul, Turkey*

OBJECTIVES: To estimate the life time CoD in metastatic colorectal cancer (mCRC) patients who have progressed after standard therapies, in Turkish setting. **METHODS:** A panel consisting of experts held a meeting to discuss the disease management in mCRC. They reviewed the literature and discussed the local clinical practices. All cost components (anticancer medications, routine care including inpatient and outpatient costs and adverse event management) were evaluated. The clinical/economic parameters were entered as inputs of a cohort partition model mimicking the follow-up of patients till death. Mid-2015 local prices for medications and procedures were used as sources. Mid-2015 EUR currency rate (2.9274TL/EUR) was used. **RESULTS:** Percentages of patients according to the pharmaceuticals for anticancer treatment were as follows: capecitabine 85%, bevacizumab 35%, 5-FU+bevacizumab 12.5%, Mod-FOLFIRINOX 7.5% and raltitreksed 1.5%. Other pharmacologic treatment included medications related with gastrointestinal symptoms (antacid, anti-diarrheal, anti-emetic), analgesics and opioids. Outpatient costs included oncologist visits, blood tests, imaging and palliative radiotherapy (in 5%). Adverse events evaluated included constitutional, skin, cardiac, pulmonary, gastrointestinal, blood/bone marrow, infectious, neurologic and metabolic events. The components of life time CoD (2544EUR) were as follows: anticancer treatment (216EUR), other pharmaceuticals (95EUR), routine care (247EUR) (inpatient 120EUR + outpatients 127EUR) and adverse event management (5.5EUR). **CONCLUSIONS:** The most costly component of expenses in mCRC is anticancer treatment followed by routine care costs. Especially off-label chemotherapy agents are constituted significant part of this routine care costs.

PCN109

COST AND COST-EFFECTIVENESS DATA ON PANCREATIC CANCER: A COMPREHENSIVE REVIEW OF THE LITERATURE

Vandeneede N[1], De Paepe A[1], Specenier P[2], Strens D[3]

[1]*Antwerp University, Antwerp, Belgium,* [2]*Antwerp University Hospital, Edegem, Belgium,* [3]*Realidad, Grimbergen, Belgium*

OBJECTIVES: To summarize the existing literature regarding the medical cost and cost-effectiveness associated with treatment and follow-up of pancreatic cancer. **METHODS:** PubMed was used as search engine to retrieve publications in Medline, using the search terms "pancreatic cancer" AND "cost" with a publication date filter (from January 1st 2000 up to September 1st2014) and language filter (English). This search yielded 416 results of which 48 were relevant for this review. Cost were recalculated in Euros (€) using the June 5 2015 currency rate of $1 = €0.8914, CA$1 = €0.7131 and £1 = €1.3667. **RESULTS:** The medical cost from diagnosis to death of one or more stages of pancreatic cancer were reported in 8 studies conducted in USA (n= 3), Sweden (n= 3), Germany (n= 1) and Japan (n= 1). Four studies included